

prevention - protection - enforcement



AEMT Student Workbook

Updated 8/2013

The Office of Emergency Medical Services has adopted the US Department of Transportation National Education Standards AEMT as the course of study for all AEMT Candidates in the State of South Dakota. This course will provide you with the knowledge and skills to provide quality advanced pre-hospital care to the sick and injured. This workbook has been produced to assist you in understanding the course requirements along with preparing you for the National Registry written and practical examinations. The Office of EMS wishes you the best of luck in continuing your education in the rewarding world of Emergency Medical Services.

Table of Contents

Chapter 1	
Intro/State EMS Office 1	National Registry Skill Sheets
Communicable Disease and	Patient Assessment-Medical16
Prevention 2	Patient Assessment-Trauma17
1 Teverition2	Supraglottic Airway Device18
	Cardiac/AED19
Chapter 2	IV/Bolus Medications20
Student Requirements/Status 3	Pediatric Intraosseous Infusion21
Liability Insurance3	Pediatric Respiratory Compromise22
South Dakota Laws 3-4	Supine Spinal Immobilization23 Seated Spinal Immobilization24
National Registry	Bleeding Control
Testing Requirements4	Shock Management25
Recertification Guidelines5	Long Bone Immobilization26
Clinical Requirements5	Joint Immobilization27
AEMT Course Completion List5	National Registry Registration
	Students-How to Register28
Chapter 3	
Forms6	
Medication Administration7	
Ventilation Performance8	
IV Performance9	
Team Lead: Chest Pain10	
Team Lead: Respiratory Distress11	
Team Lead: Altered Mental Status12	
Complete Patient Assessments13	
Student Course Evaluation14	
Clinical Observation15	

Chapter 1: State EMS Staff & Responsibilities

The EMS Office is part of the Department of Public Safety and consists of 6 staff members located in Pierre, Sioux Falls, and Rapid City to best serve the EMS system in South Dakota. During your course of study we will provide you with, not only the information contained within this handbook, but visit your class at the beginning and close to the conclusion of your class. In the opening class we will review information contained within this handbook, complete registration paperwork, and review not only your responsibilities but that of your instructor and the state. During the class closing session you will be given instruction on the National Registry written and practical examination process and answer any last minute questions to better prepare you for the final examination.

South Dakota Department of Public Safety Emergency Medical Services Staff

Director

Marilyn Rutz, NRP

Emergency Medical Services

South Dakota Department of Public Safety

118 W Capitol Avenue Pierre, South Dakota 57501 Phone: (605) 773-4031 Fax: (605) 773-6631

E-mail: marilyn.rutz@state.sd.us

Educational & Professional Standards Coordinator

Brad Janecke, NRP

Emergency Medical Services

South Dakota Department of Public Safety

118 W Capitol Avenue Pierre, South Dakota 57501 Phone: (605) 773-4031 Fax: (605) 773-6631

E-mail: brad.janecke@state.sd.us

West River Emergency Medical Specialist

Alan Johnson, NRP

Emergency Medical Services

South Dakota Department of Public Safety

510 Campbell Street

Rapid City, South Dakota 57703

Phone: (605) 394-6027 Fax: (605) 394-1677

E-mail: alan.johnson@state.sd.us

Central Emergency Medical Specialist

Robert Hardwick, EMT-Intermediate/99

Emergency Medical Services

South Dakota Department of Public Safety

118 W Capitol Avenue Pierre, SD 57501 Phone: (605) 773-4031 Fax: (605) 773-6631

E-mail: bob.hardwick@state.sd.us

Eastern Emergency Medical Specialist

Robert Keys, NRP, EMS Data Research Analysis

Emergency Medical Services

South Dakota Department of Public Safety

315 N Main, Suite 210 Sioux Falls, SD 57104 Phone: (605) 367-4249 Fax: (605) 367-4253

E-mail: robert.keys@state.sd.us

Secretary

Aspen Joiner

Emergency Medical Services

South Dakota Department of Public Safety

118 W Capitol Avenue Pierre, SD 57501 Phone: (605) 773-4031 Fax: (605) 773-6631

E-mail: aspen.joiner@state.sd.us

Communicable Disease Prevention

It is important that every person within the health care community afford themselves protection when it comes to communicable diseases. A common concern of the EMT is Human Immunodeficiency Virus (HIV), Acquired Immune Deficiency Syndrome (AIDS) and Hepatitis B. These seem to cause the most concern; however, contact with any communicable disease is a serious risk. Consider that you put not only yourself at risk, but also family and friends who may become exposed through contact with you! Your own health and safety must be your first consideration. Medical Directors cannot force you to take protective measures; however, if you neglect to take proper precautions after being advised of the dangers, you bear the responsibility for the consequences of your own actions. This may include the financial responsibilities.

Services will provide you with some type of hand protection. Gloves, even though uncomfortable and inconvenient, provide a first line of defense against infection. Most contact with an infected patient that causes problems for EMS personnel comes from contact with your hands. Therefore, it is extremely important that you glove up before you pull up, properly dispose of used gloves after a run, and then thoroughly wash your hands.

Additional protection that helps keep you at minimal risk is safety glasses and a mask. However, some situations may make them a hindrance to patient care. It is suggested that they be available for your use and that you exercise good judgment as to using them to provide yourself at least minimal protection when splatters of body fluids may occur (extrications, etc.).

Remember these important principles:

- 1. Don't become part of the problem, remain part of the solution.
- 2. Error on the side of safety.

Your safety is more important than your patients safety - without you, they have no care or protection. Remember to <u>GLOVE UP</u> before you <u>PULL UP</u> and if the situation dictates, provide yourself eye and respiratory protection. Again, it is worth repeating that it is extremely important that after an ambulance run used gloves are disposed of properly and your hands are thoroughly washed.

If you would like additional training concerning facts and myths in dealing with communicable diseases, contact the nearest Rural Health Education Center or the South Dakota Department of Public Safety.

Chapter 2: Student Requirements, Student Status, SD Laws, Student Responsibility and Clinical Requirements

Student Requirements

The following requirements must be met by potential students in order to attend courses and take the National Registry practical and CBT exams:

- 1) Be 18 years of age
- 2) Must be a high school graduate or have a GED
- 3) Must be a certified EMT
- 4) Have completed all clinical skills and must submit required documents to State
- 5) Be signed off by Course Coordinator as completing the course

Students with felonious backgrounds must inform their course coordinator and the State EMS Office, either through the Emergency Medical Specialist in the area or the Pierre office. All students must adhere to the National Registry Felony Policy.

Student Status

Student Status allows the Student to perform Advanced Life Support Skills under the preceptor of an AEMT, Paramedic, RN, Physician, or Physician's Assistant. These skills include: medication administration, the initiation of an intravenous line, ventilations, team leadership during ambulance internship, patient assessments of chest pain, respiratory, altered mental status, pediatric, adult, & geriatric patients. Student Status is granted by the South Dakota Board of Medical and Osteopathic Examiners after review of your application which must be completed online by the first day of class.

The board may grant authorization for student status in advanced life support upon verification that the applicant meets the following criteria according to SDCL 36-4B-6: is at least eighteen years of age; has successfully completed an approved high school course of study or has passed a standard equivalency test; is of good moral character; and has been tentatively accepted in an approved advanced life support training program. All applicants including RN's, LPN's, and PA's, must be currently certified as an EMT to take an AEMT course. Students must obtain student status before working with patients, doing clinical experiences or taking the final test.

Liability Insurance

<u>Liability insurance is strongly recommended.</u> Students should check with their class coordinator.

Definitions

SDCL 36-4B-1 (1) "Advanced Life Support"—A level of pre-hospital and inter-hospital emergency care consisting of basic life support procedures and definitive therapy including the use of invasive procedures and may include the administration of drugs and manual defibrillation.

SDCL 36-4B-1 (2) Advanced Life Support Personnel—Any person other than a physician who has completed a department and board approved program and is licensed as an emergency medical technician-Intermediate/85; emergency medical technician-special skills; or emergency medical technician-paramedic.

SDCL 36-4B-1 (7) "Emergency Medical Technician-Advanced," any person who has successfully completed a program of study approved by the department and the board in all areas of training and skills set forth in the advanced emergency medical technician instructional guidelines and standards, including placement of esophageal and supraglottic airways, intravenous cannulation, shock management, administration of specific medications, and other advanced skills approved by the board, and who is licensed by the board to perform such advanced skills;

SDCL 36-4B-1 (8) "Emergency Medical Technician/EMT," any person trained in emergency medical care in accordance with standards prescribed by rules and regulations promulgated pursuant to 34-11-6, who provides emergency medical services, including automated external defibrillation under indirect medical control, in accordance with the person's level of training;

SDCL 36-4B-1 (9) "Emergency Medical Technician-Intermediate/85," any person who has successfully completed a department and board approved program of instruction in basic life support and advanced life support skills in shock and fluid therapy, placement of esophageal airways, and other advanced life support skills approved by board action, and who is licensed by the board to perform such skills, including automatic defibrillation;

SDCL 36-4B-1 (10) "Emergency Medical Technician-Paramedic," any person who has successfully completed a program of study approved by the department and the board and is licensed as an emergency medical technician-paramedic, which includes all training and skills set forth herein for emergency medical technician-Intermediate/85 and other advanced skills programs approved by board action, and who is licensed by the board to perform such Intermediate, special, and advanced skills;

SDCL 36-4B-1 (11) "Emergency Medical Technician-Intermediate/99," any person who has successfully completed a department and board approved program of instruction in all areas of emergency medical technician-intermediate/85 curriculum plus other specific areas of emergency medical care in the following areas: manual and automated external defibrillation, telemetered electrocardiography, administration of cardiac drugs, administration of specific medications and solutions, use of adjunctive breathing devices, advanced trauma care, tracheotomy suction, esophageal airways and endotracheal intubation, Intraosseous infusion, or other special skills programs approved by board action, and who is licensed by the board to perform intermediate skills plus such special skills;

SDCL 36-4B-1 (12) "Emergency Medical Technician-Student Status," any person who has received authorization for student status by the board and who has been accepted into an advanced life support training program to perform, under direct supervision, those activities and services currently being studied;

National Registry Testing Requirements AEMT

At the end of the AEMT course you will be evaluated using the National Registry written and practical examinations. To be eligible to take the written exam you must submit a course completion certificate signed by the course coordinators, student and medical director; documentation of your medication administrations, IV completions, ventilations, team leadership, and patient assessments. A National Registry Application must be filled out completely online.

You have three attempts to pass the written test in two years; however you must pass the written and practical within one-year of each other.

Each time you take the written test you will need to fill out a new test application and pay the \$100 testing fee.

The practical Exam consists of ten skill stations; you must have a passing score on all portions of the test.

- 1. Patient Assessment—Medical
- 2. Patient Assessment—Trauma
- 3. Alternative Airway Device (Supraglottic Airway)
- 4. Cardiac Arrest Management/AED
- 5. Intravenous Therapy/Bolus Medications
- 6. Pediatric Intraosseous Infusion
- 7. Pediatric Respiratory Compromise
- 8. Random Skills
 - Spinal Immobilization (Seated Patient)
 - Bleeding Control/Shock Management
 - Long Bone Immobilization
 - Joint Immobilization
 - (You will be tested on one skill in the random station)
- 9. Spinal Immobilization (Supine Patient)

If you pass all ten stations you have completed the practical exam.

If you fail four stations or less you may retest at that exam site.

If you retest and pass the stations then you have completed the practical exam

If you retest and fail a station you must go to a different site to retest that station

If you retest the second time and pass, you have completed the practical exam

If you fail a station on the second retest, you must report to a different test site and retake the entire practical again.

If you fail five or more stations you must retest the entire exam at a different test site. You have three opportunities to pass the practical exam within two years of completion of your class, but you must pass the written and practical within one-year of each other.

Recertification Guidelines for the Advanced Emergency Medical Technician All South Dakota AEMT's are required to maintain certification on a biennial (two-year) basis by June 30th of the year they expire. An AEMT must be state certified; however, in order to act as a South Dakota AEMT it is legally necessary to be licensed through the State Board of Medical & Osteopathic Examiners on a yearly basis. An application for licensing can be completed online.

An AEMT is responsible for completing and submitting the necessary materials to the Emergency Medical Services Office. If a change of name, address, or affiliation occurs, please notify the Emergency Medical Services Office in writing or by calling (605) 773-4031.

South Dakota certification is separate from National Registry reregistration and requirements for the two differ. For questions or concerns regarding your South Dakota certification, contact the Emergency Medical Services Office at (605) 773-4031. For questions or concerns regarding your National Registry of Emergency Medical Technicians registration contact the National Registry of Emergency Medical Technicians at (614) 888-4484 or visit www.nremt.org.

Clinical Requirements:

The following requirements are strongly recommended but not required to be completed at approved sites:

- 1) Successfully complete 15 medication administrations on live patients,
- 2) Successfully ventilate 10 live patients,
- 3) Successfully start 25 IV's on live patients,
- 4) Successfully complete 10 team leads in pre-hospital setting (ambulance internship),
- 5) Successfully assess, and treat 2 patients each with the following complaints: chest pain, respiratory distress, and altered mental status.
- 6) Complete assessment on 2 of each of the following patients: pediatric, adult, and geriatric

Those hospital and ambulance sites agreeing to provide observation time do so voluntarily as they recognize the benefit to both the student and patient. Always remember that the observation period is a privilege, not a right and a high level of professionalism is required.

When reporting for the ambulance observation, please observe the following general guidelines as well as the specific guidelines required by the individual hospital/ambulance service you will be observing.

- Wear clean, dark colored, comfortable dress slacks and a plain white shirt without patches or logos. Shoes are to be clean and comfortable. No jeans, T-shirts, Western style boots, or open toe shoes should be worn. Jackets should also be appropriate and without patches or logos. Always remember to dress according to weather conditions. Bring gloves, head cover, etc., if weather conditions indicate a possible need.
- 2. Report on time to the staff person or area designated to you. You should cancel only if absolutely necessary. If it becomes necessary to cancel, notify the appropriate people as soon as possible. It is important to remember that available ride time may be limited and rescheduling may be difficult.
- 3. Maintaining patient confidentiality is mandatory. If you are found jeopardizing the patient/provider relationship, you will be dismissed immediately from further observation time and the AEMT training program.
- 4. Be sure to read and follow specific observation policies for the hospital/ambulance service that is providing your observation time.
- 5. Never attempt to perform skills that are outside your training ability.

AEMT Course Completion Check List

All of the following items are to be completed and presented to the State Emergency Medical Specialist or Course Coordinator before you challenge the National Registry of Emergency Medical Technicians practical and written examinations.

- 1. Medication Administration (15)
- 2. Ventilation Performance Evaluation (20)
- 3. Intravenous Performance Evaluation Form (25)
- 4. Complete Team Lead: Chest Pain (10), Respiratory Distress (10) Altered Mental Status (10)
- 5. Complete Assessment: Pediatric (2), Adult (2), Geriatric (2)
- 6. Student's Evaluation of AEMT Course
- 7. Clinical Site Evaluation

Chapter 3: Forms, Skill Sheets, Registration Instructions

Please note on the top of all of the forms, except the National Registry score sheets, are instructions on where to submit the completed forms.

Clinical Forms:

- Medication Administration
- Ventilation Performance Evaluation form
- IV Performance Evaluation form
- Team Lead: Chest Pain
- Team Lead: Respiratory Distress
- Team Lead: Altered Mental Status
- Complete Assessment: Pediatric, Adult, Geriatric
- Class Evaluation
- Clinical Site Evaluation

Skill Sheets:

Patient Assessment-Medical
Patient Assessment-Trauma
Alternative Airway Device (Supraglottic Airway)
Cardiac Arrest Management/AED
Intravenous Therapy/ Bolus Medications
Pediatric Intraosseous Infusion
Pediatric Respiratory Compromise
Spinal Immobilization Supine Patient
Spinal Immobilization Seated Patient
Bleeding Control/Shock Management
Immobilization Skills/Long Bone Injury
Joint Immobilization

National Registry Registration Instructions

Creating Your Account/Applying for NREMT Exam

Medication Administration

(Submit to Course Coordinator)

Name:	
-------	--

The purpose of this evaluation is to assure that all students can demonstrate the ability to give required medications correctly and effectively. Each student must be checked for accuracy by an AEMT, Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student will be required to successfully give at least 15 medications to live patients, no manikins. These patients can be from the field, hospital, or fellow students. All attempts must be supervised by a trained preceptor in that skill. Sheets must be filled out completely.

Date	Name of Medication	Amount Given	How Given	Preceptor
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

Ventilation Performance Evaluation Form

(Submit to Course Coordinator)

Name:
The purpose of this evaluation is to assure that all students can demonstrate the ability to ventilate a patient effectively. Each student must be checked for accuracy by an AEMT, Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student is strongly recommended but not required to successfully ventilate 10 live patients, or manikins. These patients can be from the field, hospital, or fellow students. All attempts must be supervised by a trained preceptor in that skill. Sheets must be filled out completely.

Date	Patient Age	Location (ER/Ambulance/Classroom)	Preceptor
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Intravenous Performance Evaluation

(Submit to Course Coordinator)

Name:						
The purpo	se of this evaluat	ion is to assure	that all students	can demonstrate	e the ability to s	tart a

The purpose of this evaluation is to assure that all students can demonstrate the ability to start an intravenous line. Each student must be checked for accuracy by an AEMT, Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student will be required to successfully start 25 intravenous lines on live patients only. These patients can be from the field, hospital, or fellow students. All attempts must be supervised by a trained preceptor in that skill. Sheets must be filled out completely.

Date	Location	IV/Site	Attempt/Success	Preceptor
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				

Team Lead: Chest Pain

(Submit to Course Coordinator)

The purpose of this evaluation is to assure that all students can demonstrate the ability to correctly
assess a patient with chest pain. Each student must be checked for accuracy by an AEMT,
Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student is strongly
recommended but not required to successfully assess 10 live patients or simulator with chest pain.

These patients can be from the field, hospital, or fellow students. All attempts must be supervised by a trained preceptor in that skill. Sheets must be filled out completely.

Name: _____

	1 4	NA 1 /= 1		5 .
Date	Age	Male/Female	Successful(yes/no)	Preceptor

Team Lead: Respiratory Distress (Submit to Course Coordinator)

Name:
The purpose of this evaluation is to assure that all students can demonstrate the ability to correctly assess a patient with respiratory distress. Each student must be checked for accuracy by an AEMT,
Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student is strongly

	,
recommended but not required to successfully	assess 10 live patients or simulator with respiratory
distress. These patients can be from the field,	hospital, or fellow students. All attempts must be
supervised by a trained preceptor in that skill.	Sheets must be filled out completely.

Date	Age	Male/Female	Successful(yes/no)	Preceptor

Team Lead: Altered Mental Status

(Submit to Course Coordinator)

The purpose of this evaluation is to assure that all students can demonstrate the ability to correctly
assess a patient with altered mental status. Each student must be checked for accuracy by an
AEMT, Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student is strongly
recommended but not required to successfully assess 10 live patients or simulator with altered mental
status. These patients can be from the field, hospital, or fellow students. All attempts must be

supervised by a trained preceptor in that skill. Sheets must be filled out completely.

Name:

Date	Age	Male/Female	Successful(yes/no)	Preceptor

Complete Patient Assessments

(Submit to Course Coordinator)

Name:		

The purpose of this evaluation is to assure that all students can demonstrate the ability to completely and correctly assess the following patients: two pediatric, two adult, and two geriatric. Each student must be checked for accuracy by an AEMT, Paramedic, Registered Nurse, Physician or Physician's Assistant. Each student will be required to successfully assess these patients, no manikins. These patients can be from the field, hospital, or fellow students. All attempts must be supervised by a trained preceptor in that skill. Sheets must be filled out completely.

Date	Type (Pediatric, adult, geriatric)	Age	Male/ Female	Successful(yes/no)	Preceptor



AEMT PROGRAM EVALUATION FORM

(South Dakota EMS Office Copy)

Course Location:

	Name (no	t required):					
I would recommend the AEMT Course to a frier No Way Maybe					у		
Not at all	The A Just Bar		as met my expectations Definitely	Beyond	my Exp	ectations	
The following questions are			te the AEMT Course and numbers to evaluate cou		improvi	ng future	courses.
1. Excelle	ent	2. Good	3. Average		4. Poo	r	
Instructors (enthusiasn	n, attitude, inte	rest, availability	/)	_ 1	2	3	4
Training Methods (use	of time, didact	ic, practical's)		_ 1	2	3	4
Education Literature (to	extbooks, work	books, handou	ts)	. 1	2	3	4
Audiovisual Aids (Pow	erPoint, video,	overheads)		_ 1	2	3	4
Training Aids (availabil	lity, use, practio	cal labs)		1	2	3	4
Written and Practical E	xaminations (u	understandable	, beneficial)	_ 1	2	3	4
Length of Course (too s	short, too long,	too fast, too slo	ow)	1	2	3	4
Overall Evaluation of C	Course			_ 1	2	3	4
Additional Comments, Re	ecommendatio	ns, or Ideas for	further courses/trainings	s (use bad	ck of she	eet if nece	essary)
							

(Submit to SD EMS Office)

Name of site
Type of facility (i.e. hospital, clinic, ambulance service)
What areas of the facility were you allowed in? (i.e. ER, hospital floor, clinic, etc.)
Time at site
Date at site
Number patient contacts
Was your preceptor enthusiastic, helpful, available, have a good attitude?
How would you rate your overall experience?
Would you recommend this clinical site to other students?
Comments
Please make copies of this form as needed if doing clinicals at more than one site or on different dates.